



where

R_a and R_b are each, independently, hydrogen or an alkyl group, or R_a and R_b , together, form a cycloalkyl group;

each X is, independently, an alkyl group;

○ is a five- or six-membered aryl or heteroaryl group;

each Z is, independently, an alkyl group, -OH, -OR, halogen, -CF₃, -CN, -NH₂, -NHR, or -N(R)₂, wherein when Z is -N(R)₂ the R groups may, together, form a cyclic alkyl group;

each R is, independently, an alkyl group, an aryl group, or an alkaryl group;

each W is an alkyl group;

n is 0 or an integer from 1 to 4;

y is 0 or an integer from 1 to 5;

z is an integer from 1 to 8; and

R_5 is an alkyl group, alkenyl group, or aralkyl group,
or a pharmaceutically acceptable salt thereof.

18. (Amended) The compound of Claim 17, wherein

R_a and R_b are each, independently, hydrogen or a C_{1-8} alkyl group, or R_a and R_b , together, form a cycloalkyl group;

each X is, independently, a C_{1-8} alkyl group;

O is a five-membered heteroaryl group or a six-membered aryl or heteroaryl group;

each W is a C_{1-8} alkyl group;

n is 0, 1 or 2;

y is 0 or an integer from 1 to 3;

z is an integer from 1 to 4; and

R_5 is a C_{1-8} alkyl group, a C_{3-8} alkenyl group, or an aryl- C_{1-4} alkyl group.--

19. The compound of Claim 18, wherein O is a five-membered heteroaryl group containing up to 3 heteroatoms, a six-membered aryl group or a six-membered heteroaryl group containing up to three heteroatoms.

20. The compound of Claim 19, wherein the heteroatoms are each, independently, nitrogen, oxygen or sulfur.

21. (Amended) The compound of Claim 20, wherein

R_a and R_b are each, independently, hydrogen or a C_{1-4} alkyl group, or R_a and R_b , together, form a cycloalkyl group;

each X is, independently, a C_{1-4} alkyl group;

n is 0, 1 or 2;

y is 0, 1 or 2;

z is an integer from 1 to 4; and

R_5 is a C_{1-8} alkyl group, a C_{3-8} alkenyl group, or a phenyl- C_{1-4} alkyl group.

22. The compound of Claim 21, wherein

○ is a six-membered aryl group; and

z is an integer from 1 to 4.

26. A method of binding opioid receptors, comprising administering an effective amount of the compound of Claim 17 to a mammalian subject in need thereof.

B2 27. (Amended) The compound of Claim 22, wherein ○ is a phenyl group.

28. The compound of Claim 17, wherein z is 1.

29. The compound of Claim 17, wherein ○ is a six-membered aryl group.

30. The compound of Claim 17, wherein ○ is a phenyl group.

31. The compound of Claim 17, wherein at least one W is bonded to a carbon atom adjacent to the carbon atom bearing the diamino substituent.

32. The compound of Claim 31, wherein z is 1, 2, or 3.

33. The compound of Claim 32, wherein each W is, independently, an alkyl group having 1 to 8 carbon atoms.

34. The compound of Claim 17, wherein each W is, independently, an alkyl group having 1 to 8 carbon atoms.

35. The compound of Claim 34, wherein z is 1, 2, or 3.

36. The method of Claim 26, wherein the subject is a human.

37. The method of Claim 26, wherein delta opioid receptors are bound.

38. The method of Claim 26, wherein the compound functions as an agonist selective for the delta receptor.

39. A method of treating heroin addiction, pain, mu-induced respiratory depression, migraines, allergies, diarrhea, depression, alcoholism, hypertension, or obesity, comprising administering an effective amount of the compound of Claim 17 to a subject in need thereof.

40. The method of Claim 39, wherein the subject is a human.

41. A method of treating smoking addiction, comprising administering an effective amount of the compound of Claim 17 to a human subject.--

SUPPORT FOR THE AMENDMENTS

The definition of z in dependent Claim 21 has been amended to be consistent with the definition of this variable in independent Claim 17. A period (".") has been inserted at the end of Claim 27. No new matter is believed to have been added to this application by these amendments.

REMARKS

Claims 17-22 and 26-41 are pending.

Applicants submit that the application is in condition for allowance for the reasons set forth in the Amendment and Request for Reconsideration filed on November 14, 2001. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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